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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,510

08/16/2005

Antonio Lopez Munoz

MDR-0039

7871

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EXAMINER

MCCLENDON, SANZA L

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,510	Applicant(s) LOPEZ MUNOZ, ANTONIO	
	Examiner Sanza L. McClendon	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 13, 2008 has been entered.

Response to Amendment

2. In response to the Amendment received on 8/13/2008, the examiner has carefully considered the amendments. The claim rejection under 35 U.S.C. § 112, 2nd paragraph and 1st paragraphs for claims 19-30 have been overcome by the amendment and has hereby been withdrawn for consideration.

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 19-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a

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whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al (5,275,646) in view of Codos et al (6,467,898).

Marshall et al teaches a photocurable ink composition. Said ink comprises a colorant and a liquid phase consisting essentially of polymerizable monomers, an optional conductive compound and a photoinitiator and/or sensitizer. The composition is curable by exposure to radiation, such as ultraviolet light. The composition can comprise up to 70%, e.g. 20 to 60%, by weight of a mono-functional monomer, such as isobornyl acrylate among others found in column 3. In order to balance the properties Marshall et al sets forth the addition from up to 70%, preferably from 30 to 50% of di-functional monomers, such as hexandiol acrylates, tripropylene glycol di (meth) acrylates, and others as found in column 3. Additionally, Marshall et al sets forth the use of up to 10% by weight of tri-functional monomers, such as trimethylolpropane tri (meth) acrylate—see column 3. The photoinitiators and photosensitizers can be found in column 4 along with the colorants. Additionally, polymers and prepolymers can be added to increase viscosity and/or increase the crosslink density in the cured ink—see column 5. Marshall et al sets forth in such a way that one of ordinary skill in the art would be able to obtain viscosities as high as up to 50 cps at 25 °C can be obtained or as low as 5 to 6 cps at 25 °C can be obtained depending on the amount of/proportions of reactive monomers added to the composition in the overall teachings of the disclosure—see column 2, column 3, lines 45, column 5, lines 29-64, and column 6, lines 20-21. Therefore, it is deemed Marshall et al encompasses applicant's viscosity range of 10 to 30 cps. Per example 1, Marshall et al teaches preparing a mixture of reactive monomers and photoinitiators. Separately, preparing a mixture comprising a colorant and reactive monomers and prepolymer/polymers to prepare a pigment dispersion and milling the dispersion to a particle size of no greater than 1 micron and adding the 1st preparation with stirring to obtain a polymerizable ink composition curable by exposure to radiation. While example 1 teaches dissolving the photoinitiator in a

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polymerizable composition (monomers and oligomers) and then adding to a dispersion comprising said colorant and monomer system, it is deemed that this still renders applicant's claim 19 obvious (i.e., step 2 diluting with a mixture of mono- and multi-functional monomers and step 3 adding a photoinitiator system). The courts have upheld selection of any order of mixing ingredients is *prima facie* obvious—see *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930). Thus it is deemed that it would have been obvious to first disperse the colorant, dilute with reactive monomers to a specific viscosity and then add the photoinitiator. Regarding claim 26, it is deemed obvious in view of the reference since one of ordinary skill in that art would recognize this known polymerization technique is an obvious means of applying radiation to cure a photopolymerizable composition.

The primary difference between the reference and the instant invention is Marshall et al does not teach the use of sublimatable coloring agents in the ink jet ink composition. However, sublimation dyes types are known in UV polymerizable inkjet ink compositions used in digital printing methods, as seen in Condo et al.

Condos et al teaches methods using a UV polymerizable inkjet ink composition for printing on textiles via a digital printing process—see column 4, lines 51-52. Said method includes combining a dye component with a UV curable ink composition component. Said dye can be a dispersed dye, an acidic dye, basic dye, metallized dye, naphthol dye or a sublimation dye—see column 5, lines 51-55 and claim 21. Said UV curable ink composition can be any that is composed essentially of polymerizable monomers—column 10, lines 40-56 and column 14, lines 25-30.

Marshall et al and Condos et al are analogous are because they are from the same field of endeavor, that is the art of UV polymerizable inkjet ink compositions and methods of using the same. Therefore, it would have been obvious, at the time of the invention, to an artisan of ordinary skill in the art to use sublimation dyes, as suggested by Condos et al, in an inkjet ink compositions as taught by Marshall et al. The motivation would have been a reasonable expectation of success in printing onto media such as fabrics, as taught by Condo et al in the absence of evidence to the contrary or unexpected results. It is deemed that claims 19-30 are rendered obvious in view of the combination of references.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/

Primary Examiner,

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SMc